

LISTING OF CLAIMS:

The below listing of claims will replace all prior versions, and listings, of claims in the application:

Please cancel claims 3, 4, 16, 21 and 22.

Please amend claims 1, 5, 6, 8, 9, 12, 14, 15, 19 and 20 as follows:

1. (Amended) A method for identifying a patient having an increased risk for developing breast precancer or breast cancer, said method comprising the following steps:

(a) introducing a ductal access tool into a breast duct, said ductal access tool comprising at least one elongated lumen;

(b) introducing a fluid into the breast duct through said at least one elongated lumen;

(c) retrieving a ductal fluid sample from within the breast duct through said at least one lumen, [providing a ductal fluid sample from one duct of a breast of a patient, said fluid not mixed with] said ductal fluid sample being free of any ductal fluid from [any other] another duct

of the breast; and

(d) detecting a viral agent in the ductal fluid sample.

2. (Original) A method as in claim 1, wherein the viral agent is selected from the group consisting of a whole virus, a portion of a virus, a viral protein, a viral nucleic acid, and a viral marker, in the sample.

3. Cancelled

4. Cancelled

5. (Amended) A method as in claim [3] 1, wherein steps (a)-(c) of the method [is] are repeated for [more than one duct on a breast] at least one additional breast duct.

6. (Amended) A method as in claim [3] 1, wherein steps (a)-(d) of the method [is] are repeated for a plurality of breast ducts [on a breast].

7. (Original) A method as in claim 1 further comprising analyzing the ductal fluid for abnormal cytology.

8. (Amended) A method as in claim 1, wherein a viral agent is detected, and further comprising the steps of: periodically repeating steps (a)-(c); and monitoring a variable selected from the group consisting of a viral titer, concentration of a viral agent, and presence of a viral marker in the ductal fluid samples [by taking repeated periodic ductal fluid samplings].

9. (Amended) A method as in claim 8, wherein [a] the viral agent is monitored and the viral agent is selected from the group consisting of a whole virus, a portion of a virus, a viral protein, a viral nucleic acid, and a viral marker by taking repeated periodic ductal fluid samplings.

10. (Original) A method as in claim 8, wherein the periodicity is selected from the group consisting of daily, weekly, biweekly, monthly, bimonthly, every six months, annually, and biannually.

11. (Original) A method as in claim 1, wherein the viral agent is selected from the group consisting of papilloma virus, epstein-barr virus, and herpes virus.

12. (Amended) A method of treating a patient at risk for or having a breast precancer or breast cancer, said method comprising the following steps:

(a) introducing a ductal access tool into a breast duct, said ductal access tool comprising at least one elongated lumen;

(b) introducing a fluid into the breast duct through said at least one elongated lumen;

(c) retrieving a ductal fluid sample from within the breast duct through said at least one lumen;

(d) detecting a viral agent in [a] the retrieved ductal fluid sample [collected] from [a] the breast duct; and

(e) delivering to the patient a composition comprising an antiviral agent specific for the detected viral agent.

13. (Original) A method as in claim 12, wherein the viral agent is selected from the group consisting of a whole virus, a portion of a virus, a viral protein, a viral nucleic acid, and a viral marker.

14. (Amended) A method as in claim 12, wherein the antiviral agent is delivered intraductally to [a] the breast duct in which the viral agent is detected.

15. (Amended) A method as in claim 12, further comprising repeating steps (a) – (c) for a plurality of additional breast ducts; and wherein a viral agent is detected in at least one of the fluid samples separately retrieved from the plurality of additional breast ducts [more than one fluid sample collected separately from more than one breast duct].

16. Cancelled.

17. (Original) A method as in claim 12, wherein the viral agent is selected from the group consisting of papilloma virus, epstein-barr virus, and herpes virus.

18. (Original) A method as in claim 12, wherein the antiviral agent is selected from the group consisting of an anti-HPV viral agent, an anti-EBV viral agent, and an anti-herpes viral agent.

19. (Amended) A method as in claim 12, wherein said delivering step includes delivering the composition comprising said antiviral agent [is delivered] systemically.

20. (Amended) A method as in claim 14, wherein said delivering step includes [the antiviral agent is delivered by] placing a ductal access tool in [a target] the breast duct and infusing a composition comprising the antiviral agent into the breast duct through the ductal access tool placed in the breast duct.

21. Cancelled.

22. Cancelled.

*AS
Concluded*

AMENDMENTS TO THE FIGURES

The following is a listing of the amendments to the figures:

Please cancel Figure 2.